

Mathematical Linguistics.

Linguistic puzzles as a tool for developing mathematical thinking in a school setting

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MATHEMATICAL LINGUISTICS

Focuses on logic puzzles based on the authentic data taken from natural human languages and other cultural phenomena such as ethnomathematics, writing scripts, number and kinship systems in cultures.

Mathematical linguistics as a non-formal education tool

- helps omitting any application of formal tools,
- helps encouraging student to analyse the data without any prior knowledge about the given language or linguistics,
- helps developing the ability of critical thinking, analytical reasoning and deduction, based on linguistic puzzles and charades,
- is useful for exercising logic, analytical skills, aside from teaching formal procedures to solve mathematical (or any other) problem,
- is highly focused on students own ability to analyse the empirical data set in search for hidden patterns, concepts or abstract relationships existing in real languages,
- teaches breaking down complex problems into smaller parts, paying attention to detail.

ASSOCIATION OF RECREATIONAL LINGUISTICS (SLR)

SLR main goals are: expanding knowledge about languages and cultures through lectures, workshops and puzzles. Helping to develop basics STEM skills through play, workshops, lectures and puzzles.



Lectures and workshops

Lectures and workshops on language diversity, endangered languages, number systems, and writing systems.

Puzzles

SLR members are part of Regional and General Committee of OLM, Tower of Babel (Warsaw) and other mathematical contests. They're authors of all the problem sets used during OLM since 2012. Example problem sets can be downloaded with QR code.

Teacher guides

Example lesson plans and workshop ideas can be downloaded with QR code.



MATHEMATICAL LINGUISTICS OLYMPIAD (OLM)

OLM is an interdisciplinary contest for 7th/8th graders and high school students. Tower of Babel is a local competition for primary school pupils (4th-6th grade).

OLM has three stages:

local/school, Voivodeship, central OLM does not in guarantee benefits for finalists or laureates (exam-free admission to a chosen University programme, exempt from final exams like Matura). Nonetheless, it is one of the biggest contest in Poland having the biggest number of participants on local/school level.

